area of the support surface, wherein the oligonucleotides of each composition are characterized by:

(1) independently having a length of from about 20 to about 300 nucleotides;

(2) having internucleotide linkages selected from the group consisting of phosphorothioate linkages, 2'-O-methyl-phosphodiesters, 2'-O-alkyl, 2'-O-ethyl, 2'-O-propyl, 2'-O-butyl, 2'-O-alkyl-n(O-alkyl), 2'-methoxyethoxy, 2'-fluoro, 2'-deoxy-erythropentofuranosyl, 3'-O-methyl, p-isopropyl oligonucleotides, phosphodiester, 2'-$O(CH_2CH_2O)_xCH_3$, butyne, phosphotriester, phosphoramidate, propargyl, siloxane, carbonate, carboxymethylester, methoxyethoxy, acetamidate, carbamate, thioether, bridged phosphoramidate, bridged methylene phosphonate, phosphorodithioate, bridged phosphorothioate and/or sulfone internucleotide linkages, 3'-3', 5'-5', 5'-2' linkages, and combinations thereof;

(3) having a binding affinity to a complementary sequence greater than the corresponding binding affinity of a non-modified oligonucleotide having the same sequence;

(4) having nucleotides that possess a substitution at a 2' position of the ribose group, said substitution distinguishing said oligonucleotide from naturally occurring RNA or DNA; and

(5) having a pH stability of at least one hour at 37°C at a pH in a range of about 0.5 to 6;

wherein the associated oligonucleotides of one distinct area of the array exhibit substantially the same T_m when bound to a target nucleic acid as oligonucleotides of another distinct area of the array. --